REMARKS

Claims 24-43 are pending. Claims 1 to 23 have been canceled. Claims 36-43 have been withdrawn.

§103 Rejections

Claims 24, 26-30, and 32-35 stand rejected under 35 USC §103(a) as being anticipated by Fernando et al. (WO 99/46028).

The rejection of claims 24, 26-30, and 32-35 under 35 USC §103(a) as being unpatentable by Fernando et al. is unwarranted and should be withdrawn.

Applicants, in claim 24, claim an end cone insulator dimensioned for being disposed between inner and outer end cone housings in an end cone region of a pollution control device, the end cone insulator comprising (a) ceramic fibers having a bulk shrinkage no greater than 10 percent using the Thermal Mechanical Analyzer test and (b) less than 50 weight percent inorganic colloidal material based on a weight of the ceramic fibers, wherein the end cone insulator is self-supporting, seamless, conical, flexible, non-intumescent and dimensioned for being disposed between inner and outer end cone housings in an end cone region of a pollution control device.

Even assuming arguendo, the material reported by Fernando et al. comprised (a) ceramic fibers having a bulk shrinkage no greater than 10 percent using the Thermal Mechanical Analyzer test and (b) less than 50 weight percent inorganic colloidal material based on a weight of the ceramic fibers, they fail to teach or suggest other required features of claim 24 such as, by way of example, being seamless or conical. With regard to the conical feature, it is said in the Office Action that:

> … Fernando et al. … teach casting the [Fernando et al.] mats so as to form the mats in whatever shape desired, including cone shaped … (page 16, lines 18-27). In regards to the shapes Fernando teaches that the materials are used for catalytic converters as well as diesel particulate traps and the like, and that the shape of the mat would be adjusted to fit the invention. Therefore, it would have been obvious to one of ordinary skill in the art to form the mat into any shape, including conical as presently claim depending on the end use.

First, for example, contrary to the understanding of the assertion in the Office Action at page 16, lines 18-27, there is no mention of "cone shaped." Second, for example, even assuming arguendo "the shape of the mat would be adjusted to fit the invention" as alleged the Office Action, the Office Action fails to provide sufficient evidence to support a situation where the Fernando et al. mat would be used in a conical shape. To the extent personal knowledge is used to supply any of this evidence, an Affidavit is respectfully requested.

With regard to the seamless feature, it is acknowledged in the Office Action that Fernando et al. do not mention "seamless". Further with regard to "seamless", it is said in the Office Action that:

> … [Fernando et al. do] mention that the mat may be "easily and flexibly fitted around the catalyst support structure". While this does not explicitly mean the mat is seamless, it does encompass the embodiment that the mat is fit over and not wrapped around the catalyst support structure. One of ordinary skill in the art at the time of the invention would be motivated to have the mat be seamless because it would eliminate one less point of weakness in the mat (the seam) and also allow for easier and cheaper production by not creating a need for an additional seam forming step. Examiner points out that die or vacuum casting the mat would easily enable one of ordinary skill in the art to form said mats into a seamless shape.

First, for example, again, the Office Action acknowledges that Fernando et al. do not mention "seamless".

Second, for example, although the Office Action states "One of ordinary skill in the art at the time of the invention would be motivated to have the mat be seamless because it would eliminate one less point of weakness in the mat (the seam)", the Office Action does not provide the underlying evidence to support this reasoning. To the extent personal knowledge is used to supply any of this evidence, an Affidavit is respectfully requested.

Third, for example, although the Office Action states "One of ordinary skill in the art at the time of the invention would be motivated to have the mat be seamless because it would … allow for easier and cheaper production by not creating a need for an additional seam forming step", the Office Action does not provide the underlying evidence to support this reasoning. With regard to the former (i.e., easier), there is insufficient evidence and/or analysis of the evidence to support the conclusion that it is *actually* easier to make a suitable product without a seam than with a seam. With regard to the former (i.e., cheaper), there is insufficient evidence and/or analysis of the evidence to support the conclusion that it is *actually* cheaper to make a suitable product without a seam than with a seam. To the extent personal knowledge is used to supply any of this evidence, an Affidavit is respectfully requested.

Claims 26-30 and 32-35 depend directly or indirectly from claim 24. Claim 24 is patentable, for example for reasons given above. Therefore, claims 26-30 and 32-35 should also be patentable.

In summary, the rejection of claims 24, 26-30, and 32-35 under 35 USC §103(a) as being unpatentable by Fernando et al. is unwarranted and should be withdrawn.

Claims 25 and 31 stand rejected under 35 USC §103(a) as obvious over Fernando et al. (WO 99/46028) in view of Sanocki et al. (WO 97/48890).

The rejection of claims 25 and 31 under 35 USC §103(a) as being unpatentable over Fernando et al. in view of Sanocki et al. is unwarranted and should be withdrawn.

Claims 25 and 31 depend directly or indirectly from claim 24. Claim 24 is patentable over Fernando et al. (WO 99/46028), for example, for the reasons provided above, and even assuming arguendo there is proper reason to combine Fernando et al. in view of Sanocki et al. fails to overcome the deficiencies of Fernando et al. Therefore, claims 25 and 31 should also be patentable.

In summary, the rejection of claims 25 and 31 under 35 USC §103(a) as being unpatentable over Fernando et al. in view of Sanocki et al. has been overcome and should be withdrawn.

In view of the above, it is submitted that the application is in condition for allowance.

Examination and reconsideration of the application is requested.

Respectfully submitted,

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